## (19) World Intellectual Property Organization

International Bureau





## (43) International Publication Date 12 January 2006 (12.01.2006)

(51) International Patent Classification<sup>7</sup>: 43/40, 47/12

A01N 49/00,

(21) International Application Number:

PCT/US2005/023426

(22) International Filing Date: 29 June 2005 (29.06.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/584,377 29 June 2004 (29.06.2004) US

- (71) Applicant (for all designated States except US): UNI-VERSITY OF FLORIDA RESEARCH FOUNDA-TION, INC. [US/US]; 223 Grinter Hall, Gainesville, FL 32611 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MIZELL, Russell, F., III. [US/US]; 155 Research Road, Quincy, FL 32351-5677 (US). ANDERSEN, Peter, C. [US/US]; 155 Research Road, Quincy, FL 32351-5677 (US).
- (74) Agents: LADWIG, Glenn, P. et al.; Saliwanchik, Lloyd & Saliwanchik, P.O. Box 142950, Gainesville, FL 32614-2950 (US).

## (10) International Publication Number WO 2006/004982 A1

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(57) Abstract: The present invention pertains to compounds and methods for controlling treehopper and leafhopper pests, such as the glassy-winged sharpshooter (GWSS), while conserving their parasites (such as parasoitoid wasps). In one embodiment, the compound is a juvenile hormone analog such as methoprene, kinoprene, and hydropene. The invention also concerns pesticidal compositions comprising the compounds of the invention and a pesticidally acceptable carrier. The invention further concerns methods for controlling pests, such as GWSS, while conserving their parasites, by applying a compound or composition of the invention to the pest or pest-inhabited locus.

